

Figure 11: Spatial plan for SPC E areas (Agriculture).

1.2.4.7 FACILITATING DEVELOPMENT OF SPC F1: URBAN AREAS

1.2.4.7.1 ESTABLISHING SUSTAINABLE SETTLEMENTS

To ensure sustainability of the urban environment, it is important that development should enhance the quality of life of the habitat communities. Requirements for sustainable urban development include the following:

- Integrate urban and rural planning** (align urban land-use planning in accordance with bioregional planning principles).
- Contain urban sprawl** (urban sprawl implies higher per capita cost of providing essential services and loss of valuable agricultural or natural land).
- Restore and maintain specific character** (urban areas must reflect the culture-historical character of the area and its people and unique local land-uses).

The SDF address the following key elements in order to ensure qualitative place-making:

- Vacant Land Analysis:** Availability and extent of vacant land that could be utilised to address the various needs of the relevant settlements and its inhabitants. The analysis also indicates potential opportunities for land development or any other appropriate forms of land use by means of Spatial Planning Categories.

- (ii) Land Use Classification: Appropriate classification of the relevant landholdings with the objective to ensure the sustainability of such land uses and the compliance thereof with the vision, goals and objectives of the area.
- (iii) Spatial Structuring Elements: To be imposed to ensure that any future urban renewal and restructuring, development projects, and associated land uses to be undertaken in the relevant settlement comply with the criteria and principles of 'good place-making'.

1.2.4.7.2 VACANT LAND ANALYSIS

The SDF builds on the premise that public land within Witzenberg is a primary resource with huge latent value and that this value should be unlocked in a sustainable manner to the extent possible.

An inventory and analysis was therefore undertaken of all public and parastatal land.

1.2.4.7.3 LAND USE CLASSIFICATION

Land-use decisions are influenced by values, norms and ethics. It is therefore clear that land-use decisions should not only be informed by rules and regulations, but also by a set of agreed-upon values, norms, and ethics. The current and potential values of the various places collectively forming Witzenberg Municipality have been recorded and translated into the above-mentioned Composite Spatial Plan which collectively provide concrete and practical guidelines for the different stages of planning, design, decision-making, implementation and management of projects and plans.

The SPCs take cognisance of the values and ethics summarised above and include all land zonings that are provided for under the existing Zoning Scheme Regulations (including the draft Witzenberg Scheme Regulations). SPCs help to clarify and facilitate coherent decision-making that can lead to better zonation, laws and regulations. It is important that municipal councillors, planning officials, local professional planners, developers, and prospective applicants understand the SPCs and Sub-categories and their specific purpose(s) and selection criteria as described in the Witzenberg SDF.

1.2.4.7.4 IMPLEMENTATION OF SPATIAL STRUCTURING ELEMENTS

A primary aim of the Witzenberg SDF is to provide guidance to the Municipality, developers, landowners and individuals with regard to future development and urban restructuring. Six Spatial Structuring Elements are proposed to guide urban renewal and future development in Witzenberg. The key functions of Structuring Elements are *inter alia* the following:

- a) Containment of urban sprawl.
- b) Promotion of urban and social integration.
- c) Promotion of acceptable higher densities.
- d) Creation of quality urban environment through urban renewal and landscaping.
- e) Reduction of the need for traffic movement and promotion of pedestrian and non-motorised movement patterns.
- f) Restoration and maintenance of a defined sense of place.
- g) Alleviation of poverty and inequality.
- h) Protection and enhancement of the properties and investment.
- i) Enhancing and simplifying decision-making regarding development applications.

The Spatial Structuring Elements are summarised below.

1.2.4.7.4.1 Urban Edge

The Urban Edge in Witzenberg consists of the following components:

- Urban Edge Line:** The *Urban Edge Line* is the demarcated outer boundary within which urban expansion can be accommodated within a defined period of time.
- Built Edge Line:** The *Built Edge Line* defines the outer boundary of the existing built up area and will always be contained by, or coincide with, the *Urban Edge Line*.
- Urban Fringe:** The *Urban Fringe* is the area located between the *Urban Edge Line* and the Built Edge Line. The *Urban Fringe* is significant because it is the area in which urban expansion must be accommodated.

The demarcation of urban edges for the respective towns and settlements is important for the achievement of the principles contained in the WCPSPDF and the Witzenberg SDF regarding the containment of urban sprawl, the intensification of development, promoting the optimum use of land, maximising the use of existing infrastructure, the integration of urban areas, conserving natural and cultural resources and preserving high potential agricultural land.

Based on the above, the SDF include Growth Management Plans to provide an illustration of the key areas identified for residential and industrial/commercial expansion. Figure 12 below provides an example of such a Growth Management Plan for Prince Alfred Hamlet.

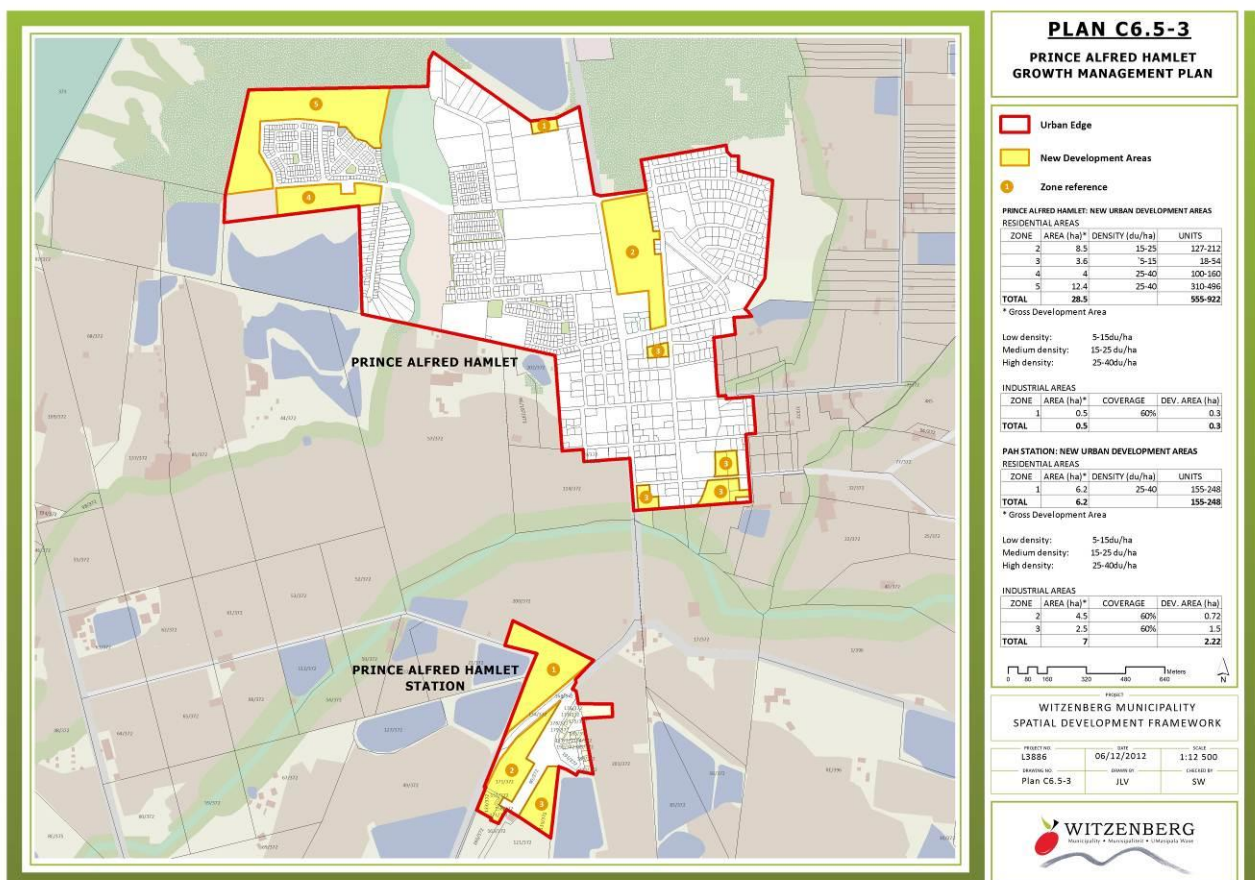


Figure 12: Growth Management Plan for Prince Alfred Hamlet.

1.2.4.7.4.2 Precincts

Precincts are special use areas, which are dominated by a primary activity together with an appropriate diversity of land uses closely associated with the primary activity. The development of such *Precincts* could influence the settlement patterns and growth of the individual towns and within Witzenberg Municipality as a whole. Three distinct precincts have been identified, namely:

- a) Central Business District (CBD).
- b) Tourism and Hospitality Precinct: This precinct consists of existing and/or envisaged residential or business-related areas where the majority of land uses are geared towards tourism or the provision of hospitality services.
- c) Industrial Precinct: This precinct consists of the existing designated industrial areas and envisaged industrial expansion areas.

1.2.4.7.4.3 Nodes

Various levels of nodes are applicable to Witzenberg. According to the Cape Winelands District Municipality SDF, Ceres has been identified as a *first order town* or Higher Order Node while Wolseley, Tulbagh and Prince Alfred Hamlet has been identified as being *third order towns* or Lower Order Nodes. Based on the significance of the particular *Local Nodes* in terms of scale, location, diversity and agglomeration of activities and services, differentiation is made between three types of Local Nodes namely:

- a) Neighbourhood Nodes: This type of node occurs at a neighbourhood level and is intended to serve the daily economic and social needs of at least one neighbourhood.
- b) Lower Order Neighbourhood Nodes: This is a scaled down *Neighbourhood Node* and usually occurs at the intersection of *Activity Streets* and *Connectors*. Lower Order Neighbourhood Nodes are intended as a public meeting place for communities (i.e. local corner café, church and playgrounds) with only the minimum of activities to satisfy the daily need of the particular community.
- c) Speciality Nodes: This type of node surrounds a primary activity and serves a specific market. Activities within these nodes are of a specific or specialized nature, which could be retail, professional services, health care, tourism, etc.

1.2.4.7.4.4 Activity Corridors

An *Activity Corridor* is a linear zone of medium to high density, mixed use development abutting a primary transport route. Activity corridors link areas of greater intensity of land use, namely *Nodes* or *Precincts*. In the activity corridors a variety of social and economic functions are integrated with higher density residential functions.

Two types of *Activity Corridors*, that reflect their primary use, are promoted in Witzenberg, namely:

- a) General Business Corridors: These are medium to high density business-orientated development areas abutting either side of a primary transport route. Secondary land uses compatible with business-orientated developments, i.e. higher density residential uses, may also be considered.
- b) Hospitality Corridors: These are areas abutting either side of the primary transport route, where low to medium density community-based hospitality initiatives and projects are promoted and implemented. In these corridors obligations are placed on those that own hospitality-related enterprises to ensure their meaningful participation in creating an environment conducive of viable tourism and to ensure their long-term commitment in this regard.

Activity corridors are important structural elements focussed on the:

- (i) Promotion of social integration;
- (ii) Increasing residential and business densities;
- (iii) Enhancing accessibility of economic and social opportunities; and
- (iv) Creating high-quality urban environments through urban renewal and intensive landscaping.

1.2.4.7.4.5 Activity Streets

An *Activity Street* is a local road that displays the same characteristics and principles of linearity and mixed use development than an activity corridor, but with a lower level of intensity of use and market threshold. It attracts enough passing trade to provide viable opportunities for local business and community facilities. *Activity Streets* play a vital function in linking previously isolated communities at the local level and provide appropriate locations for small and informal enterprises. It reinforces *Higher* and *Lower Order Nodes* and strengthens the integration of communities and the accessibility to economic, cultural and social functions.

1.2.4.7.4.6 Municipal Open Space System

The Municipal Open Space System (MOSS) is network of contiguous natural corridors and urban green areas throughout the towns of Witzenberg. The MOSS is aimed at:

- complimenting the built environment by providing it with diversity, natural quality, recreation opportunities and open space general enjoyment, and
- enhancing and protecting biodiversity in the urban environment by providing natural linkages between ecosystems and creating habitats for localized animal and plant species.

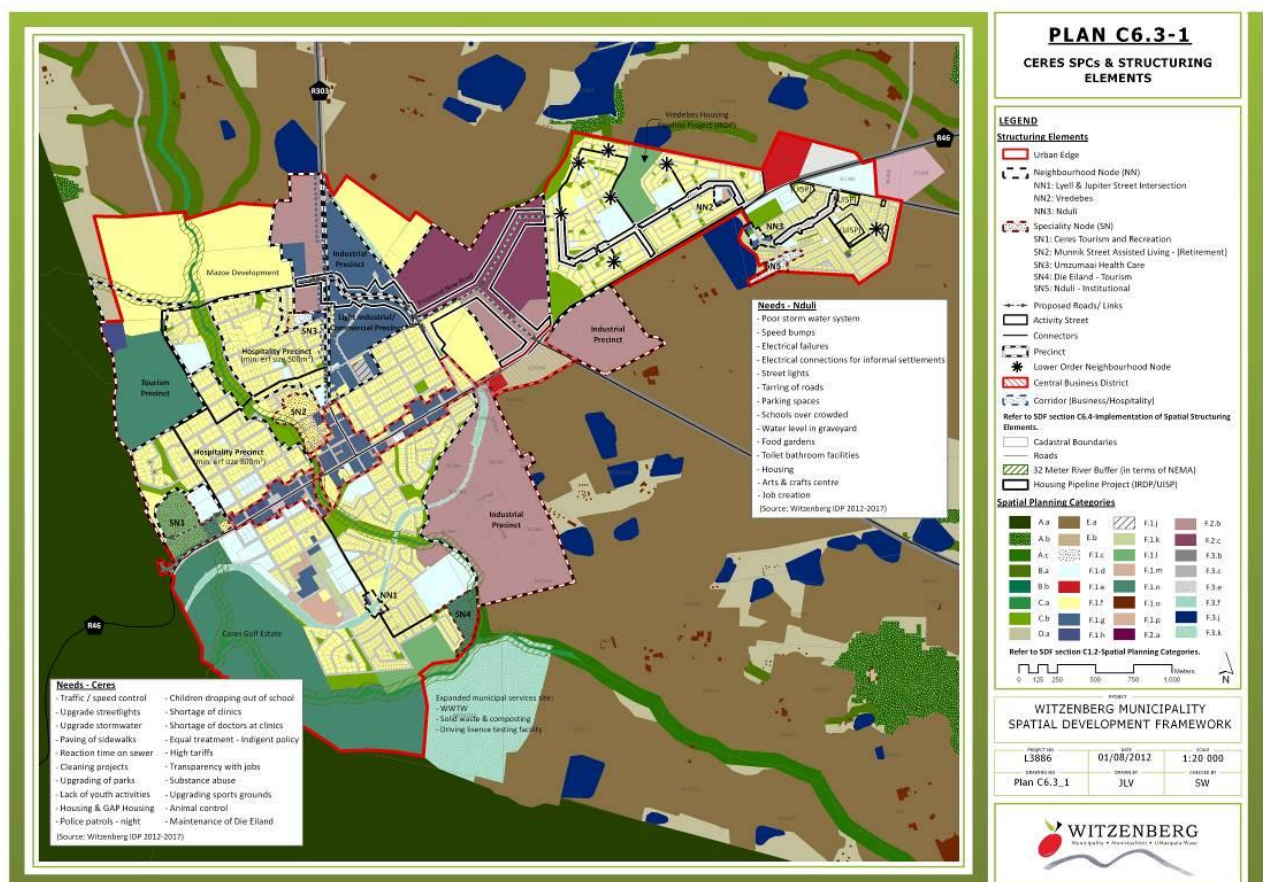


Figure 13: Ceres as an example that illustrates all the structuring elements.

1.2.4.7.5 GUIDANCE FOR GOVERNMENT AND PRIVATE SECTOR INVESTMENT

The following objectives have been identified in the Witzenberg SDF with regards to government and private sector spending:

- a) Strategically invest scarce public sector resources where they will generate the highest socio-economic returns.
- b) Deliver human development programmes and basic needs programmes wherever they may be required.
- c) Guiding the investment of public resources (capital) through the following:
 - (i) Providing a credible context for public investments.
 - (ii) Promoting equitable development of areas that have lagged behind.
 - (iii) Providing certainty to all stakeholders regarding spatial and socio-economic implications of future development in the Municipality.

A key objective is to guide the investment of government and private sector resources. The Growth Potential study of towns in the Western Cape (US & CSIR, 2010) was applied as a spatial rationale and premise for the formulation of dedicated policy guidelines and strategy as it relates to the appropriation of government funds and investment of private sector resources. The Plan below indicates the settlements categorised in terms of their levels of *social need* and *economic potential* and the investment type proposed (US & CSIR, 2010).

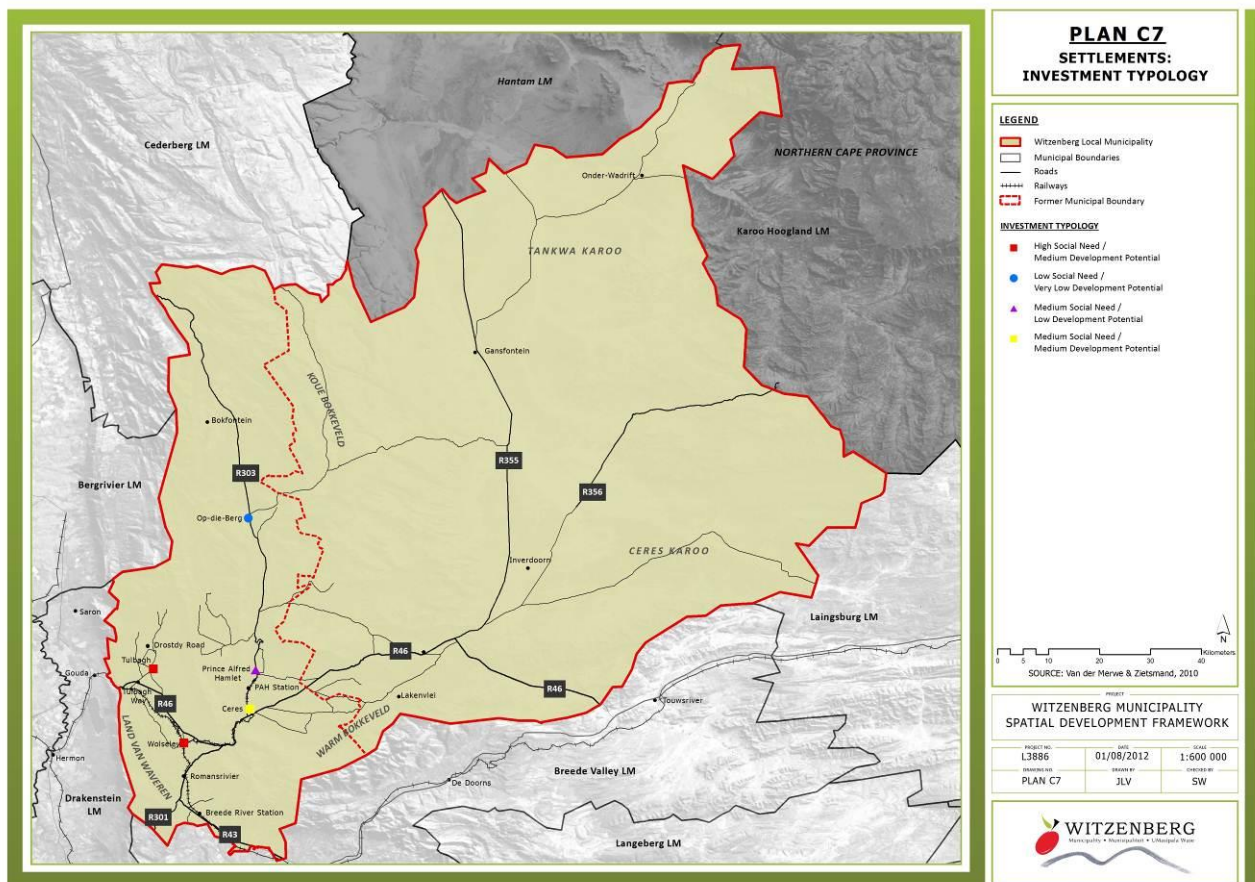


Figure 14: The settlements categorised in terms of their levels of *social need* and *economic potential* and the

investment type proposed.

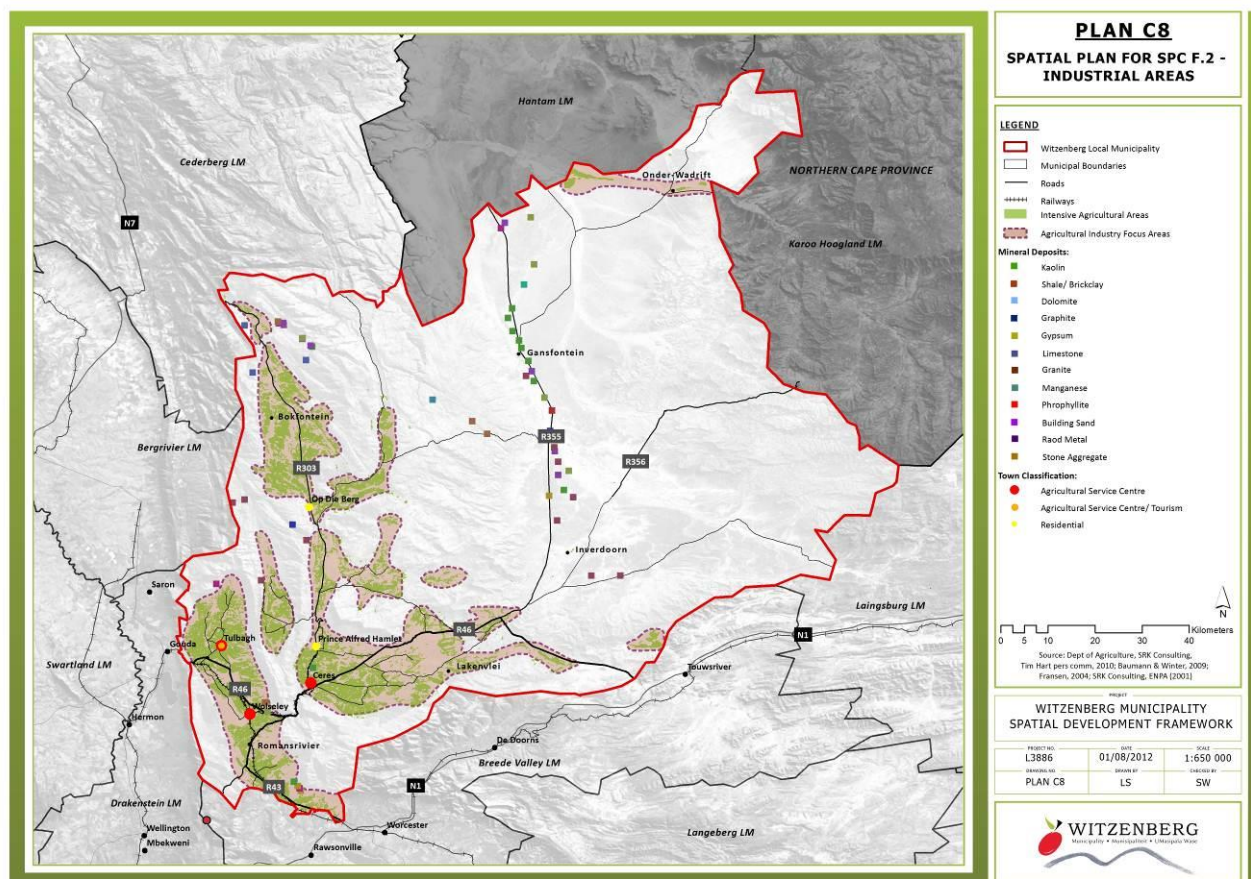
1.2.4.8 REGULATING THE DEVELOPMENT OF SPC F2: INDUSTRIAL AREAS

A key challenge facing Witzenberg Municipality is how to broaden and encourage the opportunities presented by the availability of natural resources. Industrial activities, whether large- or small-scale, have the potential to stimulate economic diversification and development in the municipality.

Industrial development can also enhance indirect impact related to inter-sectoral linkages - i.e. linkages arising between the agricultural-processing sector and other industrial and economic sectors in the municipality. The development of the energy sector holds huge benefit for Witzenberg and the country as a whole, and would have significant multipliers in the local economy. It is therefore important that innovative planning be undertaken to provide the necessary infrastructure and associated amenities to accommodate the industry in an efficient manner.

The spatial plan for SPC F.2 areas (refer to Plan below) is a constellation of the following:

- Spatial plan for SPC E: Agricultural Areas.
- Spatial plan for SPC F.1 Urban Areas.
- Mineral deposits.
- Development corridors.
- Composite development index of settlements.
- Development potential of settlements.



15: Spatial plan for SPC F.2: Industrial Areas.

Figure

1.2.4.9 ENSURING DEVELOPMENT OF EFFICIENT SPC F.3: SURFACE INFRASTRUCTURE

An effective, competitive and responsive infrastructure network is imperative for the ongoing economic development of the municipality. Much of the municipality's primary agricultural production is produced in localities distant from markets and from points of export. The municipality's ability to convey goods effectively and efficiently is a key aspect to be addressed. The relevant functionaries therefore have a vitally important task in providing the infrastructure and bulk services required by the various economic sectors, the human settlements of the municipality, and the rural hinterland.

Objectives, policy, guidelines and strategies have been identified in the Witzenberg SDF with regards to ensuring the development of the following surface infrastructure in the municipal area:

- a) Transport.
- b) Water
- c) Energy
- d) Telecommunications.
- e) Household Services.

The spatial plan for SPC F.3: Surface Infrastructure (refer to Plan below) is a constellation of the following:

- a) Spatial plan for SPC E (Agricultural Areas).
- b) Spatial plan for SPC F.2: Industrial Areas Map.
- c) Development corridors of Witzenberg Municipality.
- d) Wetlands and dams.
- e) Combined development index of settlements.
- f) Development potential of settlements.
- g) Transport network.

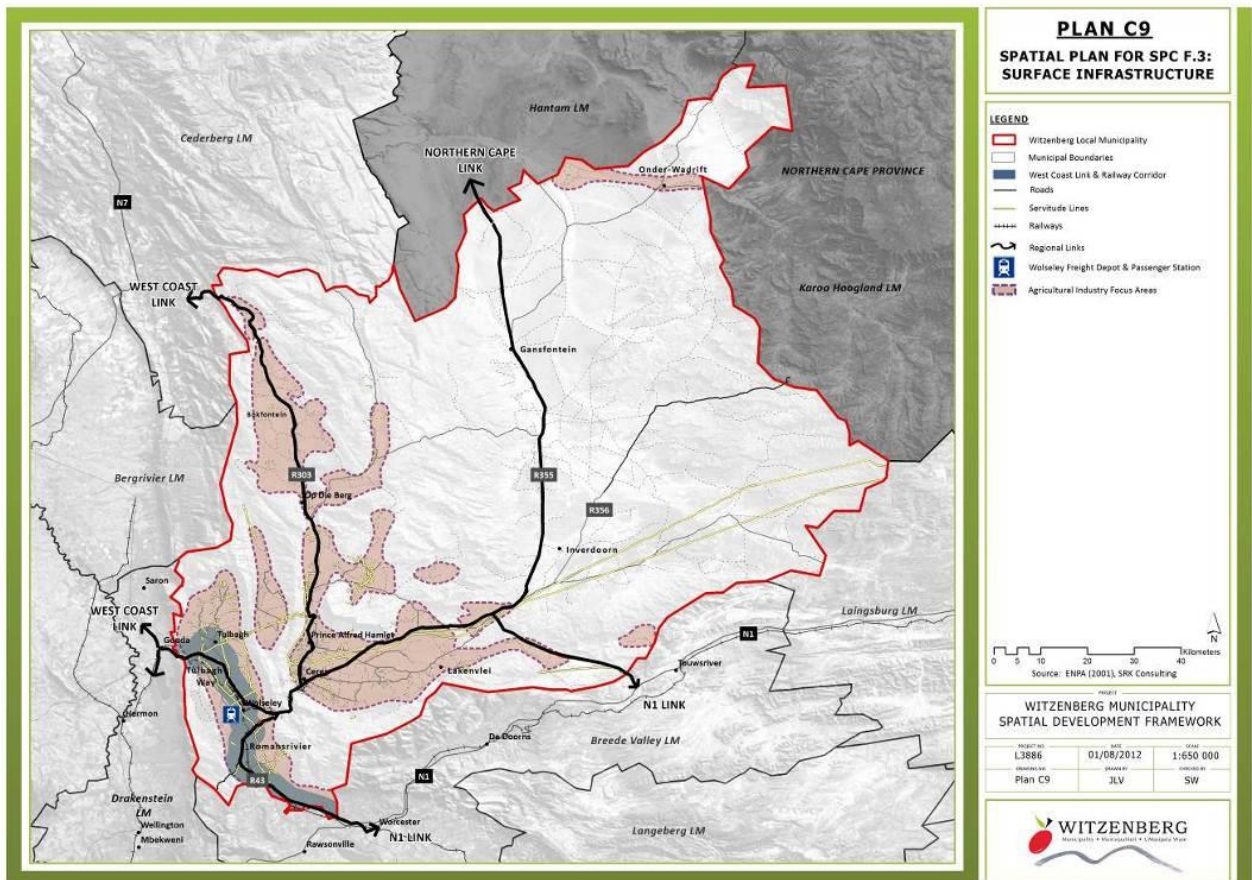


Figure 16: Spatial Plan for SPC F.3: Surface Infrastructure.

1.2.5 SECTION D: USERS' TOOLKITS TO SUPPORT IMPLEMENTATION

Section D comprises a host of users' 'toolkits'. The purpose of these is to serve as a manual for the interpretation and implementation of key concepts and proposals put forward in this SDF and to inform the implementation thereof.

The following toolkits have been prepared for the Witzenberg Municipality to ensure the practical implementation of sustainable development in its municipal area.

- a) Toolkit D1: Agreements, Legislation and Policy applicable to the SDF.
- b) Toolkit D2: Performance Management and Auditing.
- c) Toolkit D3: Guidelines for Development in Cultural Landscapes and Scenic Routes.
- d) Toolkit D4: Guidelines for preparation of a Climate Neutral Strategy.
- e) Toolkit D5: Place-Specific Planning and Design Guidelines.
- f) Toolkit D6: Special Management Area Approach.
- g) Toolkit D7: The Sustainable Development Initiative Approach.
- h) Toolkit D8: Procedure for Demarcation of neighbourhood Areas.
- i) Toolkit D9: Pre-Application Checklist

1.2.6 SECTION D: IMPLEMENTING OF THE WITZENBERG SDF

Witzenberg Municipality sees this SDF as the first step towards the implementation of holistic and integrated regional planning and management throughout its municipal area. In this regard, the Municipality believes that the SDF will promote the ideals of sustainable development through the strategies and programs proposed in the document.

It is recognised that the SDF is by no means completed or final. However, it presents the opportunity for all stakeholders to assist with the preparation of a model development and management framework which will, over time, ensure a sustainable future for all the people of Witzenberg.

It is important that this document be periodically updated in accordance with new information, improving technology and changing human and environmental needs. It is therefore necessary that need-driven research and constant monitoring be undertaken in a coherent manner.

2.1 Analysis of Socio-Economic Profile

The municipal summary below provides a fair reflection of the socio-economic reality of the municipality. This profile uses data primarily sourced from Statistics South Africa, Global Insight and administrative data from sector departments. The data sourced from sector departments are the most recent that is available. The latest survey data available at municipal level from Statistics South Africa is from the 2007 Community Survey; comparisons are also made with the 2001 Census.

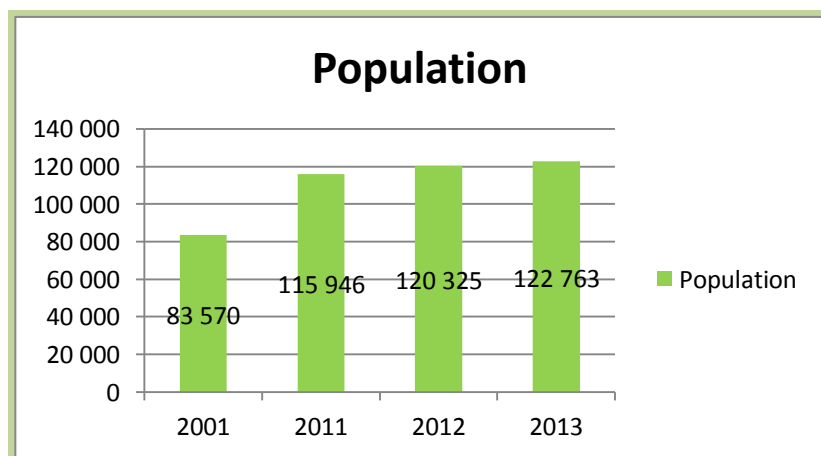
The Witzenberg Local Municipality (LM), founded in 2000, is classified as a Category B municipality and is responsible for basic service provision to the demarcated municipal area that includes the towns of Ceres, Tulbagh, Prince Alfred's Hamlet, Wolseley and Op-Die-Berg. The rural areas within the municipal boundary are Ceres Valley, Koue Bokkeveld, Achter-Witzenberg and the northern portion of Breede River Valley (Land van Waveren).

The climate in Witzenberg is known for its hot and dry summer days. Winds are seasonal and generally North-westerly or South easterly. The average annual rainfall in Ceres is about 1 088 mm and the average temperature range is 2,4°C to 29,9°C.

Located in the picturesque and fertile Breede Valley, Witzenberg is best known for its fruit and wine products. The region is also well-known for producing other agriculturally-linked products such as olives and grain, as well as for producing beef and pork products. Horse and cattle stud farms are also found within the municipal area.

The principal socio-economic realities in our region are:

- Seasonal labour and Social Grant dependency
- Unemployment rate: 5339 people
- People in poverty: 24231
- Skills Shortage (Illiteracy rate = 36%)
- Youthful population: 56.8% of population is under 30 years of age
- Population concentration: 46.9% Rural; 53.1% Urban.



➤ Source: Regional Development Profile 2013Stats SA, Census 2001, Census 2011 and Quantec 2012, 2013 projections

Population					
Number	2001	2011	% Share	2001	2011
Total	83 573	115 946	African	19.9	25.3
Male	41 574	59 554	Coloured	70.9	65.9
Female	41 996	56 392	White	9.1	7.7
Dependency ratio	51.1	48.6	Indian/Asian	0.1	0.2
			Other		0.8
Socio-economic indicators					
Education		2009			
Literacy rate (%)		70.5			
		2010			
Number of PHC facilities		16			
% immunisation coverage (< 1 yr)		82.6			
Crime (number of reported cases)		2003/04	2009/10	2011	
Drug-related crimes		735	1 378	1 986	
Sexual crimes		191	221	195	
Murder		57	46	36	
Poverty levels			2007		
Number of people accessing social grants			10 173		
			2009/10		
Number of indigent households			4 515		
Household income levels		2001	2009		
Annual income > R0 < R18 000		21.1	37.8		
Annual income > R18 000 < R42 000		13.1	18.9		
Unemployment rate (%)		2001	2007	2011	
Total		19.6	7.6	10.6	
Male (% share)			47.2		
Female (% share)			52.8		
Basic service delivery (% share of households)		2001	2007	2011	
Formal dwellings		84.4	70.1		
Informal dwellings		8.6	7.8		
Electricity		84.8	90.8	90.7	

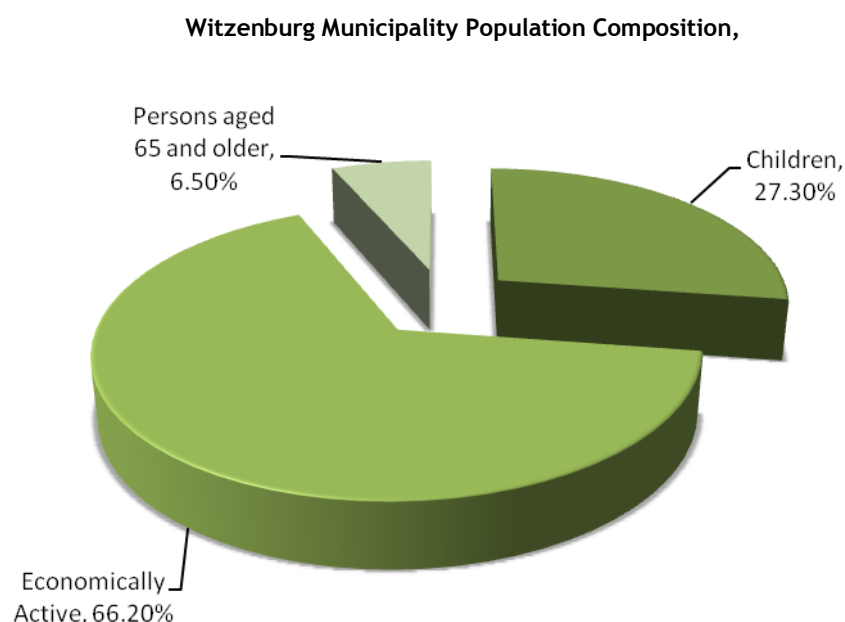
Flush toilets	83.4	91.0	91.5
Water (piped water)	98.9	92.7	89.1
Refuse removal (local authority/private)	61.8	51.1	
Economy	2001	2009	
GVA-R (R'm)	1 621	1 978	
Largest sector contributor to GVA-R: Agriculture, manufacturing and finance			
GVA-R growth rate (average %)	2001 - 2009		
Municipality	2.5		

2.1.1 Municipal Demographics

Witzenberg's population stands at 115 946 and the racial breakdown is 65.9% Coloured, 25.3% Black, 7.7% White and 0, 2% Asians. The two largest sector contributors to the GDP are agriculture (35,6%) and the manufacturing sector (20,9%), growing on average at 2,1% and 10,6% respectively per annum. Within the manufacturing sector, the food, beverage & tobacco sub-sector is clearly dominant, representing 69,4% of total manufacturing..

In 2001, the population composition was as follows: children at 29.7 per cent, economically active population at 66.2 per cent and persons aged 65 and older at 4.1 per cent of the population.

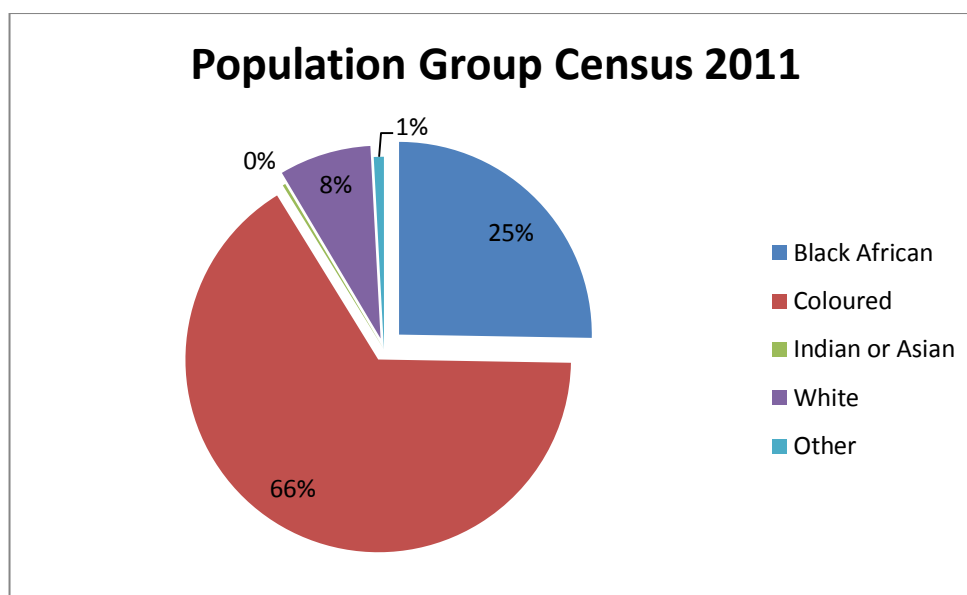
In 2007, the population composition was as follows: children at 27.3 per cent, economically active population at 66.2 per cent and persons aged 65 and older at 6.5 per cent of the population.



The youth's share of the total population decreased from 27.9 percent in 2001 to 26.2 per cent of the population in 2007. As a result the combined share of children and youth's of the total population declined from 57.6 per cent in 2001 to 53.4 per cent in 2007.

Accordingly, the child dependency ratio lowered from 44.9 per cent in 2001 to 41.3 per cent in 2007 whilst the aged dependency ratio increased from 6.2 per cent to 9.8 per cent over the same period. The overall dependency ratio remained unchanged at 51.1per cent in 2001 and 2007. The gender ratio changed from 98.9 males per 100 females in 2001 to 94.3 males per 100 females in 2007.

The Coloured racial group was the largest population group in both 2001 and 2007 followed by the African racial group. However, the Coloured population group's share of the total population decreased from 70.9 per cent to 68.5 per cent over the period. The African population group share of the total population decreased from 19.9 per cent in 2001 to 18.9 per cent in 2007.



The White racial group share of the total population increased from 9.1 per cent in 2001 to 12.7 per cent in 2007. The Indian/Asian population constituted less than 1.0 per cent of the total population in both 2001 in 2007.

2.1.2 Basic Education

The number of learners enrolled in schools in the municipality amounted to 17 697, 17 608, 17 819 and 18 123 for 2007, 2008 and 2010 respectively. The increase in enrolment from 2007 to 2010 amounts to an annual average rate of 0.8 per cent.

Cape Winelands District Learner enrolment, Learner-teacher ratio and Dropout rate, 2012

	Learner enrolment (Gr 1-12 + LSEN)	Percentage of enrolment	Average Learner teacher ratio	Average Dropout rate
Cape Winelands District	135 200		31.60%	37.54%
Witzenberg	17 639	13.0%	30.6%	38.0%

Source: Western Cape Department of Education, 2012

In 2010, 6064 learners (33.5 per cent of total learners) have enrolled in the foundation education phase, ranging from Grade R to 3. The introduction of the Grade R seems to bear fruit as Grade R learner enrolment increased by an annual average rate of 15 per cent from 2007 to 2010.

The primary phase (grades 4 to 7) recorded an enrolment figure of 6 268 learners (34.6 per cent) in 2010. Grades 5 experienced a reduction in the number of learners from 2007 to 2010. Grade 4, 6 and 7 learners increased by an annual average rates of 1.1, 1.6 and 2.6 per cent respectively from 2007 to 2010.

A total of 5 702 learners (31.5 per cent of total learners) enrolled in the secondary phases (grade 8 to 12) in 2010. The number of learners in the secondary phase decreased by annual average rate of 0.8 per cent from 2007 to 2010 which was mainly the result of reduced learner numbers for Grades 10 and 11 of 9.9 and 5.2 per cent (annual average) over the same period. There are forty six (46) schools; including seventeen (17) are no fees schools and two special focus schools which have engineering and technology as their curricula focus.

2.1.3 Educational Attainment

The differences in the level of educational attainment are less prominent for Grade 8 and Grade 12 but leans toward higher levels of attainment among females when compared to male. The most significant difference in the level of education between the males and females lies in tertiary education. Males account for 70.3 per cent and 35.3 per cent of graduates and post-graduates respectively. Females, on the other hand, account for 29.7 per cent and 64.7 per cent of graduates and post-graduates respectively.

2.1.4 Literacy Rate

70.6 per cent of the local population was estimated to be literate. The Department of Social Development defines people aged 14 years and older as literate if they have successfully completed 7 years of formal education (passed Grade 7).

2.1.5 Health

The municipality has a total of 16 primary health care facilities, including 10 fixed facility clinics, 5 mobile clinics and 1 District hospital. The municipality has 1 anti-retroviral treatment (ART) service sites and 15 tuberculosis treatment (TB) clinics. The Western Cape Department of Health reported that as in June 2010, 1 061 patients were receiving anti-retroviral treatment at the Witzenberg ART service site. HIV/AIDS has a devastating effect on the social and economic development of the population and the municipality will therefore persist with its efforts in this area, in order to ensure that prevalence rates continue to decrease.

The immunisation coverage for full immunisation in the municipality increased from 73.6 per cent in 2006/07 to 82.6 per cent in 2009/10. Compared to other local municipalities in the Cape Winelands District, the immunisation rate in Witzenberg is below the District average of 96.9 per cent in 2009/10.

2.1.6 Human Resource Capacity

Having adequate numbers of health professionals to serve at the primary health care facilities is a further determinant of quality health care. In total 6 doctors and 51 professional nurses have been employed in 2010 by the Department of Health to render health services to patients attending the PHC facilities in the municipality. This total excludes health professionals employed within the private sector.

2.1.7 Safety and Security

Witzenburg Municipality, Reported Crimes 2003/04 and 2009/10

Incident	2003/04	2009/10		
Murders	57	46	3.50%	increase
Burglaries	754	569	4.60%	decrease
Sexual Crimes	191	221	2.50%	increase
Drug related crimes	735	1378	11.00%	increase

High crime levels deter investment and erode social capital. It is important that planning should take cognisance of the importance of security and justice in building livable communities.

The number of murders decreased by an annual average rate of 3.5 per cent from 57 to 46 incidents

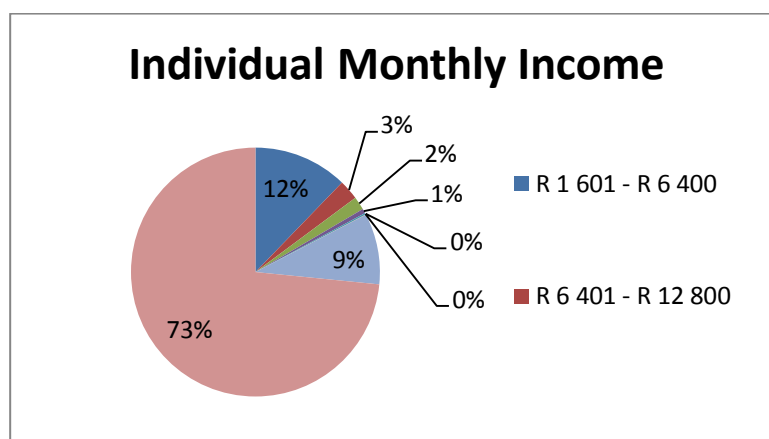
between 2003/04 to 2009/10. The number of burglaries decreased by an annual average rate of 4.6 per cent from 754 to 569 incidents between 2003/04 to 2009/10.

The number of **sexual crimes increased** by an annual average rate of 2.5 per cent from 191 to 221 incidents between 2003/04 to 2009/10. Drug related crimes have been increasing by an annual average rate of 11 per cent from 735 to 1 378 incidents from 2003/04 to 2009/10. The municipality experienced a similar trend with crimes relating to driving under the influence of alcohol and drugs which increased by an annual average rate of 7.8 per cent from 67 to 105 incidents from 2003/04 to 2009/10.

2.1.8 Household Income

Witzenberg Municipality - Household Income Levels

Annual income	2001	2009
0 - R 18 000	21.10%	37.80%
R18 000 - R42 000	13.10%	18.90%



In 2001, 58.8 per cent of all households in the municipality reported to have annual incomes of between R0 to R42 000. In 2009, the percentage of households between earning between R0 to R42 000 decreased to 32.1 per cent of all households in the municipality. In 2001, households with an annual income of R18 000 - R30 000 accounted for the largest concentration of households (21.3%) within an income category. In 2009, households with an annual income of R54 000 - R72 000 accounted for the largest concentration of households (11.6%) within an income category.

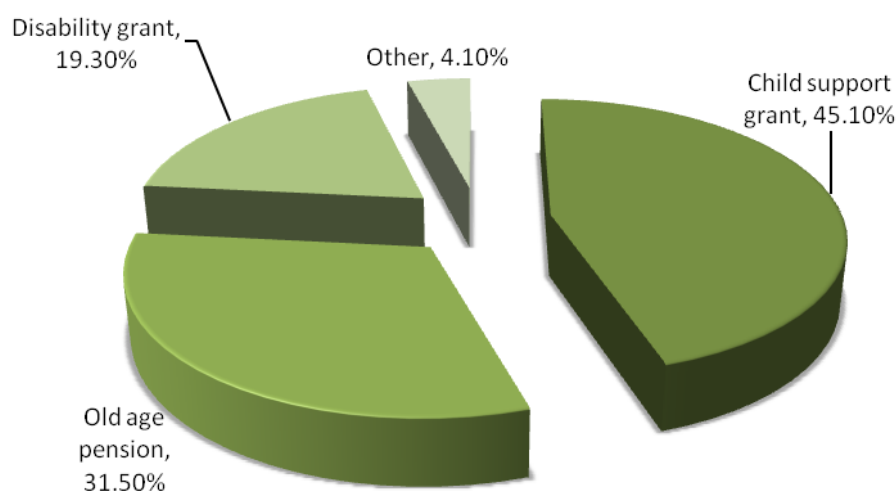
2.1.9 Gender and Age of Household Heads

Overall, households were predominantly headed by males, except for age cohorts 15 - 19 years, 75 - 79, years and 85+ years. The biggest difference in the number of male to female headed households occurs in the 35 - 39 year age cohort where male headed households outnumbered female headed households by 1 847 more male headed households.

2.1.10 Social Grants

10 173 beneficiaries' accessed social grants in 2007, 45.1 per cent received the child support grant, 31.5 per cent received the old age pension grant and 19.3 per cent received the disability grant. These grants account for 95.9 per cent of all social grants accessed in the municipal area.

Witzenberg Municipality - Social Grant Recipients 2007



The municipality also offers additional social support through its indigent policy. The indigent policy provides free and discounted rates on basic services such as water, electricity, sanitation, refuse and property rates. There were 4, 5152 households registered on the municipal indigent data base in 2010/11.

2.1.11 Labour Force Employment Status

The potentially economically active population accounted for 50 244 people in 2007. The number of potentially economically active population in the municipal area decreased by an annual average rate of 1.7 per cent from 55 634 in 2001 to 50 232 in 2007, meaning that 5 402 fewer people were available for employment in the municipal area. The labour force participation rate (LFPR) decreased from 73.5 per cent in 2001 to 72.3 in 2007.

Employment grew from 32 857 in 2001 to 33 567 in 2007 by an annual average rate of 0.4 per cent during the period 2001 to 2007, while unemployment declined by an annual average rate of 16.2 per cent from 8 007 to 2 771 persons over the same period. One of the challenges of the economy is its ability to absorb entrants into the labour market. Although the trend in employment is encouraging the data implies that the economy is unable to absorb and employ the full complement of the job market entrants and participants.

2.1.12 Skill level of the employed in 2007

Of the 33 567 people employed in 2007, 5.9 per cent could not be classified by the Community Survey as either skilled, low skilled or high-skilled and are therefore unspecified. Skilled workers accounted for 43.8 per cent of the labour force in 2007. Low skilled³ workers and high skilled workers accounted for 35.8 per cent and 14.5 per cent, respectively.

2.1.13 Unemployment

Witzenberg Municipality, Unemployment Rate

	2001	2007	2011
Total	19.60%	7.60%	
Male (% share)		47.20%	45.5%
Female (% share)		52.80%	54.5%

The number of **unemployed decreased** by an annual average rate of 6.5 per cent from 6 467 people in 2001 to 4 320 people in 2007. Unemployment was concentrated within the Coloured population. Even though the African population group has a marginally higher unemployment rate of 8.8 per cent in 2007 they account for 25.54 per cent of the total labour force and 29.4 per cent of the unemployed.

Contrastingly, the Coloured workers experienced the second highest unemployment rate of 8.3 per cent. However, the group represents the largest percentage share (63.4 per cent) of the total labour force and also the highest percentage share (68.9 per cent) of the unemployed. The White population group accounted for the lowest unemployment rate of 1.1 per cent amongst the three largest population groups (African, Coloured and White) of the total labour force. In addition, the group also accounts for the lowest percentage (1.7 per cent) of the unemployed amongst the three groups.

Unemployment is mainly concentrated amongst the youth (15 - 34 years) as the youth accounts for 1 906 (68.8 per cent) of the unemployed. The age group 20 - 24 years is particularly vulnerable at 24.9 per cent of the total unemployed. The municipality must pay attention to this phenomenon to ensure that the youth and particular the age group 20 - 24 years can be absorbed into the economy.

2.1.14 Sectoral Growth and Contributions

Gross domestic product Region (GDPR) at basic prices, R millions, constant 2005 prices (yoy % growth; 2000 - 2010)

Industry	Witzenberg	Cape Winelands
Agriculture, forestry and fishing [SIC: 1]	2.1	0.7
Mining and quarrying [SIC: 2]	-11.0	1.5
Manufacturing [SIC: 3]	2.7	2.1
Electricity, gas and water [SIC: 4]	3.1	1.5
Construction [SIC: 5]	0.5	8.2
Wholesale and retail trade, catering and accommodation [SIC: 6]	-0.7	4.9
Transport, storage and communication [SIC: 7]	6.9	6.7
Finance, insurance, real estate and business services [SIC: 8]	10.9	7.5
Community, social and personal services [SIC: 92, 95-6, 99, 0]	3.5	4.1
General government [SIC: 91, 94]	2.8	3.0
Total Municipality	3.3	3.9

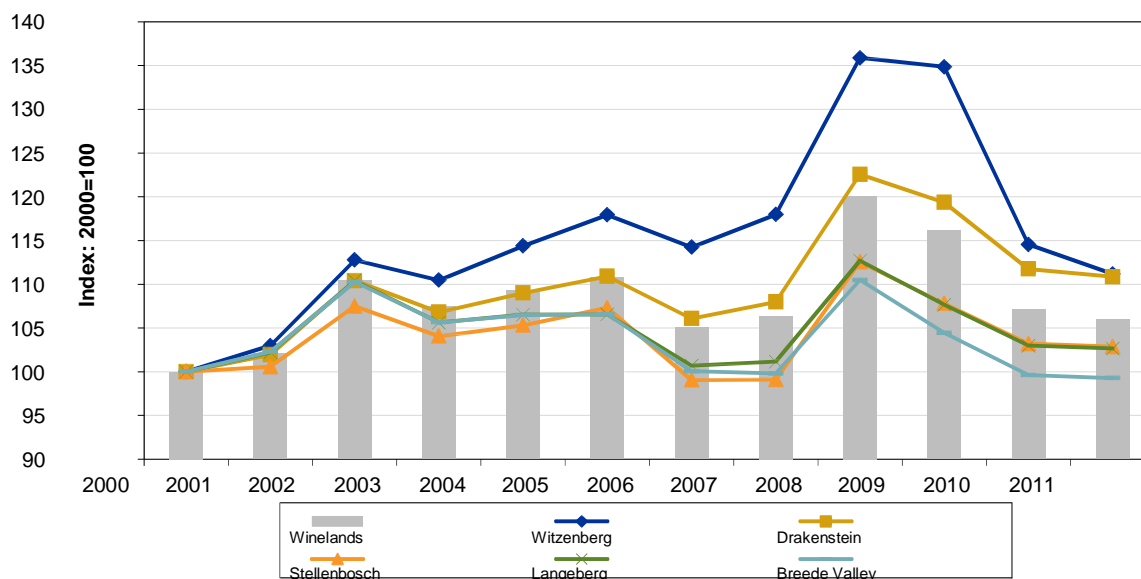
Source: MERO 2012

Sectoral composition by municipality:2011 (%)

Sector	%
Agriculture, forestry and fishing	29.1
Mining and quarrying	0.0
Manufacturing	16.2
Electricity, gas and water	1.1
Construction	1.7
Wholesale and retail trade, catering and accommodation	10.0
Transport, storage and communication	8.0
Finance, insurance, real estate and business services	22.0
Community, social and personal services	3.5
General government	8.4
Total	100.0

Source: MERO 2013

Cape Winelands District: Growth in Agriculture, forestry & fishing by municipality: 2000 - 2011



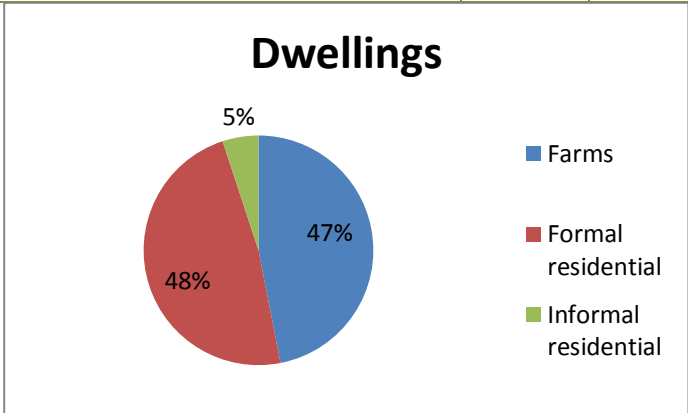
Source: MERO 2013

This sector experienced strong anti-cyclical growth in calendar 2008/09, particularly in the Witzenberg and Drakenstein municipalities. Both these municipal agricultural sectors expanded by around 10 per cent over the 2000 to 2011 period compared to a flat trend in Stellenbosch and Breede Valley and only marginal growth in Langeberg.

2.1.15 Housing

Witzenberg Municipality – Dwellings (percentage share of households)

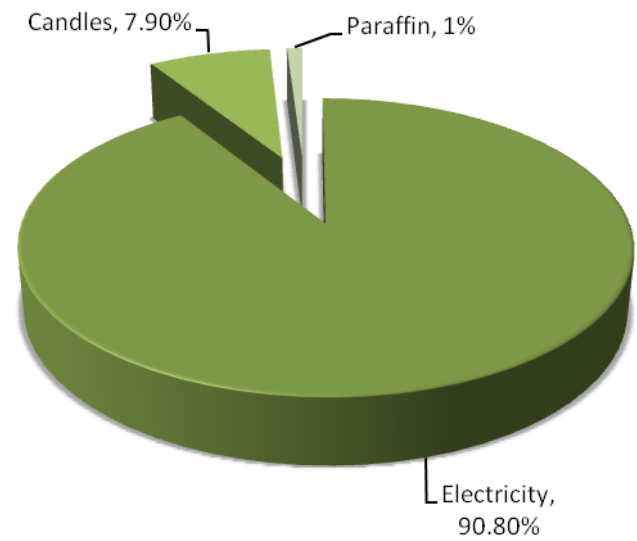
	2001	2007
Formal Dwellings	84.40%	70.10%
Informal Dwellings	8.60%	7.80%



The formal dwellings proportionately decreased from 84.4 per cent to 70.1 per cent of the total number of dwellings from 2001 to 2007. The proportional share of informal dwellings decreased from 8.6 to 7.8 per cent from 2001 to 2007. The proportional share other dwellings increased from 5.2 to 22.2 per cent from 2001 to 2007. Meeting the demand remains one of the municipality’s biggest challenges. The estimated number of households in informal settlements and trends show increased densification of informal settlements as compared to the creation of new settlements. The municipality has focused clear programmes on regularising and formalising informal settlements.

2.1.16 Electricity

Witzenberg Municipality - Energy Sources, 2007



In 2001, electricity was the main source of energy for lighting purposes as it was used by 84.8 per cent of households. Thereafter, followed by candles and paraffin which was used by 11.2 per cent and 3.4 per cent of households. In 2007, electricity remained the leading source of energy for lighting purposes as it was used by 90.8 per cent of households. The percentage of households that used candles lowered to 7.9 per cent of households in 2007 whilst the percentage of households that used paraffin lowered to 1 per cent in 2007. Electricity capacity remains a challenge especially given the effect it has on economic growth and revenue security. The municipality will continue to focus its efforts on demand side management in order to reduce consumption and ensure sustainable resource use.

2.1.17 Sanitation

In 2001, 83.4 per cent of households had access to flush toilets (connected to sewerage/septic tank). A significant proportion (9.4 per cent) of households did not have access to sanitation in 2007 whilst 4.8 per cent of households made use of the pit toilets. In 2007, 91 per cent of households had access to flush toilets (connected to sewerage/septic tank). The use of pit toilets decreased as 2 per cent of households made use of pit toilets as a means of sanitation in 2007. The municipality has also experienced a **decrease in the use of the bucket toilet system from 1.8 to 1.2 per cent of households**. Although there had been an improvement in access to sanitation, 2.3 per cent of households still did not have access to sanitation in 2007.

2.1.18 Water

Access to potable water is the norm in the municipality. The percentage share of households with access to piped water (or potable water) however lowered from 98.8 per cent in 2001 to **92.7 per cent in 2007**. Access to piped water inside the dwelling improved from 68 to 72 per cent from 2001 to 2007. The percentage share of households that access alternative water sources has increased from 1.1 per cent in 2001 to 7.4 per cent in 2007.

In 2010, the Blue Drop Certified Systems awarded the municipality third place nationally, noting that the municipality continues to manage drinking water within their area of jurisdiction with distinction. However, water supply remains a critical issue for the future with potential risks anticipated if the province faces a severe drought. The municipality will therefore concentrate its efforts on reducing the rate of unaccounted for water and leakages.

2.1.19 Refuse Removal

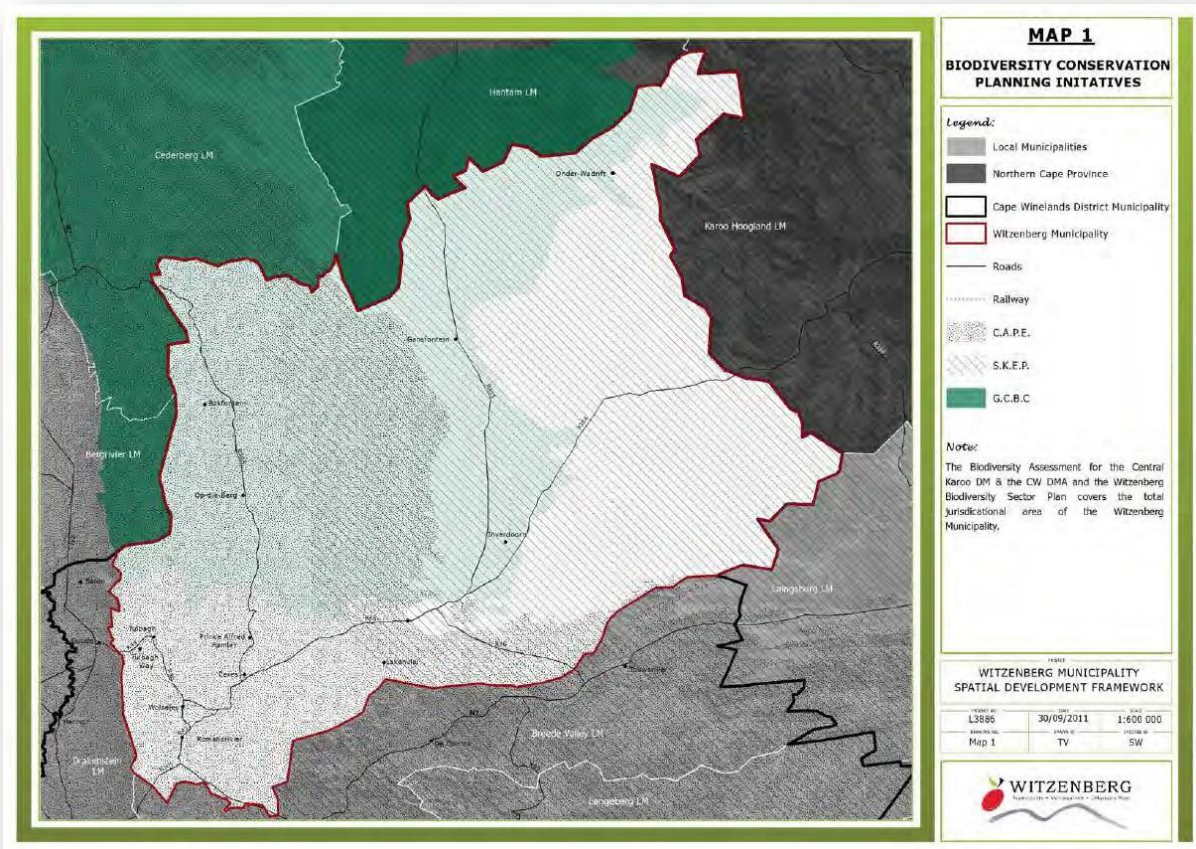
Refuse removal services by local authority/private company was the leading refuse removal source for households. However, the accessibility of this type of refuse removal service has lowered as the percentage of households that has access to refuse removal by local authority decreased from 61.8 to 51.1 per cent from 2001 to 2007. The use of communal refuse dumps has increased as the percentage of households that utilize communal refuse dumps increased from 15.7 to 35.2 per cent from 2001 to 2007. The percentage of households that made use of own refuse dumps lowered from 19.4 to 12.5 per cent from 2001 to 2007. Overall, the percentage of households that did not have access to any form of refuse removal decreased from 3.1 to 1 per cent from 2001 to 2007.

2.1.20 Roads Infrastructure

Roads are the lifelines of any economy. The better connectivity improves socio-economic conditions of the people living in those areas. Good communication and transport network opens up the economy for better utilisation of its potential resources, facilities and induces growth of all sectors.

The total road area that covers the municipality amounts to 1 917 kilometers of roads. The total amount of roads comprise of 408.89 (21.3 per cent) kilometers of surfaced roads and 1508.11 (78.7 per cent) kilometers of gravel roads.

3. ENVIRONMENTAL ANALYSIS



3.1 Environmental Management

Witzenberg is predominantly rural and dependent on agriculture not to just feed its people but as the backbone of economic activity. Environmental conservation is critical to ensure the sustainability of economic activity going forward. There is already extensive evidence of environmental damage as a result of agricultural and related activities.

The Council of Witzenberg accepts its constitutional mandate which clearly states as follows:

“Everyone has the right –

- a. to an environment that is not harmful to their health or well-being; and
- b. to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that –
 - i. prevent pollution and ecological degradation
 - ii. promote conservation, and
 - iii. Secure ecological sustainable development and use of natural resources while promoting justifiable economic and social development.

Organs of state, including municipalities, have a clear responsibility to consider the environmental

implications of actions they take or the manner in which they perform their duties. In Witzenberg municipalities case this is truly a part of the way we do things.

3.2 Environmental Status Quo

The Witzenberg region is one of pristine beauty and wonder and the environment with its natural beauty is one of its greatest assets. This however is in a state of neglect and interventions are needed to restore the environment to its natural beauty and splendor.

Problems that are currently facing us are the following:

- Our river systems is running through densely inhabited residential areas and is education of the population and law enforcement needed to prevent any pollution of the river systems .Various industrial plants and factories are also adjacent to the river and cause pollution one way or the other. Our rivers is also running through extensive agricultural used lands with the result of runoffs and other chemical polluters causing major pollution of the river systems
- The natural environments are currently neglected and no official programme exists to protect the environment. This plan attempts to put some programme in place to start looking at environmental issues and to protect it for future generations but also looking at sustainable developments to compliment the environment and kick starting economic developments in the region.

3.3 The Environmental Policy of Witzenberg Municipality

To manage the environment in a sustainable manner through sustainable development and to contribute to the improvement of quality of life of all citizens of Witzenberg by:

- Promoting the sustainable development, utilization and protection of our natural and cultural resources
- Establishing projects that ensures environmental sustainability and contributes to job creation and a better quality of life for all its citizens
- Fostering equitable access to the benefits deriving of Witzenberg's natural and cultural resources
- Harnessing the skill, experience and knowledge of the environment of all citizens
- Empowering the public, communities, and organizations through participation, environmental education and information services
- Working with all relevant stake holders and spheres of government in the spirit of good government

3.4 Spatial Context

Witzenberg Municipality covers the catchment areas of three river systems, namely the Olifantsriver in the Agter Witzenberg and the Langriver (bолоop /sytak van Doringriver-Olifantsriver) in the Koue Bokkeveld, The Dwars /Bree River in the Warm Bokke veld / Wolseley and the Breeriver and the klein berg river in the land of Waveren (Tulbagh and Wolseley).

The area is a well-known for its scenic beauty being surrounded by various mountain ranges, natural surroundings and fauna and flora.

3.5 AIM OF OUR ENVIRONMENTAL PLANNING

- □ To provide a strategy for achieving long term environmental goals and thereby enhancing quality of life and increasing environmental awareness.
- □ To explore local economic developmental possibilities such as ecotourism which is in line with environmental protection strategies by creating the environment for investment opportunities?
- □ To create awareness off the sensitivity of our environment and the need to protect it

4. CONCLUSION

Environmental management must be integrated, acknowledging that all elements of the environment are linked and interrelated, and it must take into account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection of the best practicable environmental option.

4.1 Municipal Infrastructure Analysis

The investment in municipal infrastructure has historically being influenced mainly by existing backlogs, to ensure sustainable service delivery taken into account new developments and general upgrading and maintenance. The developmental potential of urban areas plays a major role in guiding infrastructure investment to ensure sustainable service delivery to human settlements. Basic services that includes water, sanitation, electricity, refuse, roads and storm water should be the major focus areas for infrastructure budgeting and investment.

Past and current investment into bulk water resources was well supported through funding from DWA and is Witzenberg one of the few municipalities whom are well capacitated in this regard for the next 25 years. Upgrading of sewer works to ensure sustainable capacity for the next 15 years are well underway and should be completed within the next 3 years. Upgrading roads, storm water, electrical bulk provision & networks and water & sanitation networks however remain underfunded and should be increased over the next couple of years.

4.2 Water & Sanitation

All the towns in die Witzenberg Municipal area have independent water services with their own resources, distribution systems and treatment works.

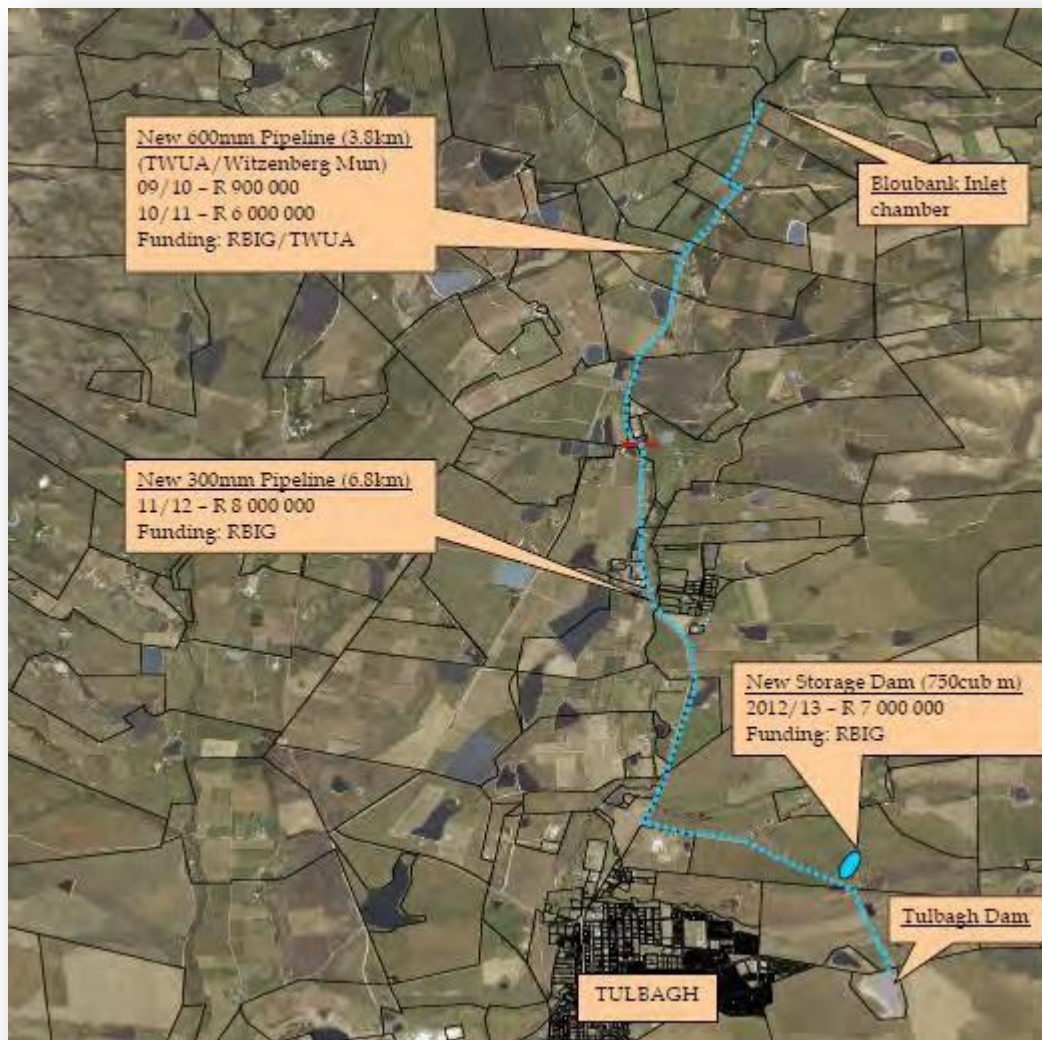
Ceres

The main resources for Ceres are the Koekedouw dam. Six boreholes serve as a backup source of supply. Water quality from Koekedouw is good and is only chlorinated before distribution. Two reservoirs (3 & 5 ML) serve as storage reservoir to the distribution network of 114 km with 4 supply zones (Bella Vista, N'Duli, Ceres main supply zone & Ceres central PRV zone). The network includes a 2 ML services reservoir, a booster pump station to the pressure tower at Bella Vista as well as a 750 kl service reservoir at Ndulli.

Sewage & industrial effluent is collected from consumers via a sewer system and treated at the Ceres Wastewater treatment plant. The plant services the areas of Ceres, Nduli, Bella Vista and Prince Alfred's Hamlet. The sewer system includes 9 booster pump station. A portion of the treated effluent is used for irrigation.

Tulbagh

Moordenaarskloof & Tierkloof are the main resources for the supply of water to Tulbagh at present. Construction has been completed to provide an additional 1.2 x10⁶ m³/a from the Klein Berg river. The project will include a storage dam with a capacity of approximately 750 000 m³ the project will be completed at the end of 2013. **One borehole at Kruysvallei supply additional water to Tulbagh.** Moordenaarskloof is evenly shared with two other users (SAPCO & Kruysvallei). During 2006 two additional resources, referred to as the Schalkenbosch tributaries and Skilpadrug, were also identified as possible future resources and infrastructure to partially linked Schalkenbosch with the water supply network was implemented in 2007 after an agreement of the management of this resource was reach with the property owner. The agreement poses some challenges and is presently under review. Funding has been secured for the completion of this project, but the agreement remains a major challenge. All the raw water is stored in a 570 ML raw water dam at present.



Bulk abstraction from Klein-Bergriver project.

The purification plant consists of five slow gravity sand filters as well as a chlorination system. Funding was also secured to upgrade the existing purification plant to deal with the additional water expected from the Kleinberg River at the end of 2012; this project is currently being implemented. (Project completed) Two reservoirs (800 kl & 1 ML) serve as clear water storage reservoir to the distribution network of 29 km with 2 pressure zones. The network includes a booster pump station to the pressure tower (500 kl). (New reservoir for 2014/2015)

Sewage is collected from consumers via a sewer system and treated at the Tulbagh Wastewater treatment plant. The sewer system includes 3 booster pump station. The plant needs to be upgraded to ensure capable future capacity. Application for funding has been secured and construction will commence during 2013. Construction in progress completion is 2014/2015.

Wolseley

Wolseley receives its water supply from the Tierkloof weir. Purification consists out of pressure filters & chlorination. The Ceres road Reservoir (680 kl) and newly constructed 6 ML Wolseley reservoir serves as a storage reservoir to the distribution network of 44 km with two pressure zones. The network includes a 4.5 ML services reservoir (Stamper Street Reservoir), which has been resealed to prevent losses, and a booster pump station. An additional pump station with a capacity of 58 l/s was completed during 2010/11 to enable the transfer of “lei” water during periods of low flow from the Artois canal to this reservoir. The project also allow for treatment at the reservoir.

Sewage is collected from consumers via a sewer system and treated at the Wolseley Wastewater treatment plant. The sewer system includes 6 booster pump station.

PA Hamlet

PA Hamlet has three water sources. They consist of the Wabooms River weir, a fountain and 3 boreholes. These boreholes have been pumped test and it was recommend that one be abandoned, while the other two can effectively be used to supplement the water supply to PA Hamlet. One of these boreholes is connected, while the other, although all pipe and electrical works are in place, has not been commissioned yet due to vandalism of the pump equipment. Due to the quality of the raw water only chlorination is required. Four 500 kl reservoirs serve as storage reservoirs to the distribution network of 32 km with only 1 pressure zone. A link between the Koekedouw dam and PA Hamlet will be constructed during 2013 and an agreement with the Koekedouw Irrigation board has been reach regarding the joint use of existing infrastructure to supply the water.

New bulk water pipeline in construction. Completion 2013/2014.



Water source for Prince Alfred's Hamlet

A significant volume of sewage generated at PA Hamlet is pumped for treatment to the WWTW at Ceres. Two pump stations are used for this purpose. A number of ervens still use private septic tank systems to deal with the sewage. Septic tanks are emptied by the municipality on request.

Op die Berg

Op die Berg has three water sources, a fountain and 2 boreholes. Due to the quality of the water only chlorination is required. 3 reservoirs as follows: 50kl, 60kl and 500kl serve as storage reservoirs to the distribution network of 6 km with only 1 pressure zone. 75% of the consumers are connected to a sewer network and treated at the WWTW. The rest is handled through private septic tanks. Septic tanks are emptied by the municipality on request.

4.3 INTERGRATED TRANSPORT

4.3.1 TRANSPORT REGISTER

Witzenberg Municipality covers an area of approximately 2 995 km² stretching from the Du Toitskloof Mountains in the south-west to the Kwadousberg Mountains in the south-east and includes the towns of Ceres, Tulbagh and Wolseley as well as the rural areas adjacent to and between these towns (Prince Alfred Hamlet, Nduli, Bella Vista, Op-die Berg, Breede River valley).

Public transport accounts for approximately 6% of total work trips in the Witzenberg Municipality. From the NHTS 2007, 66% of passengers in the Witzenberg Municipality walk and 29% use private vehicles to reach their destinations. The **minibus-taxi (MBT)** is the dominant public transport mode in Witzenberg, providing both commuter and long-distance services. MBT services operate predominantly out of Ceres during weekdays. The highest demand for taxis are on Saturdays, especially at the end of the month, with the smaller towns of Wolseley and Tulbagh becoming significantly more active on weekends.

There are currently no commuter **bus services** for local commuters in the towns of Witzenberg Municipality. The only bus services are subsidised learner transport and private (staff) contract services. Metrorail operates the Cape Town-Worcester rail line, which stops at five rail stations in Witzenberg Municipality, before arriving at Worcester station. It has a single train in the morning and afternoon.

The long distance **rail service** currently operates on a daily including weekends. Shosholozha Meyl passes through the Witzenberg Municipality en-route to Johannesburg, Port Elizabeth and Durban. Long distance rail only stops at Worcester Station thus providing an opportunity for Witzenberg Municipality residents to commute to Worcester. There are no commercial bus services in Witzenberg Municipality; however there are long distance MBT services.

The maintenance and upgrade of **public transport infrastructure** is the responsibility of the LM. There are a number of formal facilities provided by the LM but also a number of public areas that are used for parking or holding of vehicles. Public transport infrastructure challenges in Witzenberg Municipality include provision of shelters at a number of informal ranks and within the rural areas.

The **main road** system in the Witzenberg Municipality consists of the R303 from Ceres past Op-dieberg towards Citrusdal and the R46 and R43 linking the various towns with each other.

There is no formal **NMT(Non Motorized Transport) infrastructure network** in Witzenberg Municipality inhibiting NMT movement in the LM. Although, the distance from Ceres to Wolseley is approximately 14km; still within cycling distance, but the topography of the steep Mitchells Pass prohibits NMT movement. There is significant movement between Ceres and the residential area of Nduli, which provides an NMT facility with guardrail and is separated from the roadway. There is also a high dependence on NMT from the Bella Vista community to Ceres; however during month end, due to shopping trips, the NMT users become MBT passengers for the return trip to Bella Vista. Prince Alfred's Hamlet requires NMT access to Ceres for tertiary health care as low affordability does not make public transport viable. Priority should be given to provide and maintain high quality cycle ways along the routes that link these areas as bicycles are cost effective.

Records received from the Department of Education 2009 indicated that there were a total of 61 primary, secondary and combined schools in Witzenberg Municipality. The WCED confirmed that 22 schools in the Witzenberg Municipality are served by 63 **learner contract** routes and are all receiving subsidies from the WCED. Therefore 32.73% of schools in the LM are using learner contracts and of these, 55% of learners are using learner contracts. Koue Bokkeveld and Wolseley has the highest number of schools and primary schools using learner transport, namely 20 routes serving 12 schools and 16 routes serving five schools respectively.

The local situation with **freight** is exactly the same as in the past number of years with all growth being in road freight haulage. This is the largest contributor to the damage of road infrastructure. The LM is assisted with road maintenance by receiving an 80% subsidy from PGWC for road maintenance on proclaimed municipal main roads.

Tourism serves as the second economy in Witzenberg Municipality, the primary attraction being the mountainous natural and scenic beauty of the area. Promotion of agriculture and tourism is therefore vital to the continued prosperity of the area. Attention should be paid to maintenance of scenic routes.

The Department of Health provides **health services for patients** within Witzenberg Municipality in the form of various hospitals, clinics and mobile clinics. The department has at its disposal a fleet of vehicles which is used to transport staff, medication, as well as to provide mobile clinic services.

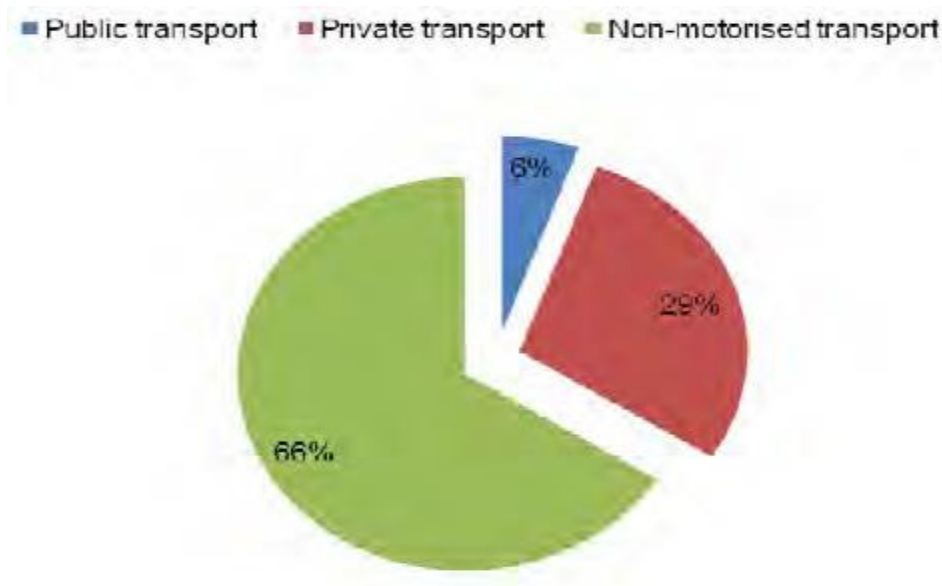
Transport planning should also include provision for **special categories of passengers** by incorporating principles of universal access design that will assist passengers to move comfortably from one place to another. People with physical disabilities represent 5.6% of the population in Witzenberg Municipality and it compares with the concentration of people with physical disabilities in CWDM.

ITS Engineers (ITS) was appointed for the Update of the Integrated Transport Plan (ITP) for Cape Winelands District Municipality (CWDM), which mainly focuses on the project progress and update of project budgets. The project includes a review of the progress on projects listed in the last Witzenberg LITP prepared in November 2010.

The scope of the project:

- Project progress and budgets
- Revision of categories of planning authorities
- Institutional capacity building.

It must be highlighted that the scope is to provide progress on existing projects which gives the opportunity for Witzenberg Municipality (WLM) to re-prioritise projects, but not to add new projects. A complete overhaul of the ITP is scheduled for 2015/2016.



4.3.2 Road Network and Traffic

The road network in Witzenberg Municipality consists of provincial roads, owned and managed by the provincial road authority, which is the Provincial Government Western Cape (PGWC).

Apart from the provincial roads, which are also known as the rural road network, the upgrade and maintenance of the local street network is the responsibility of the local authority, which is the Witzenberg Municipality.

4.3.2.1.Extent of the road network

Provincial roads

The road network through Witzenberg Municipality consists of about 1 970 kilometres of provincial roads. Major provincial roads include MR310 (R301) from Ceres, past Op-die-berg towards Citrusdal, TR22/1 and TR22/2 (R46), and MR302 (R43).

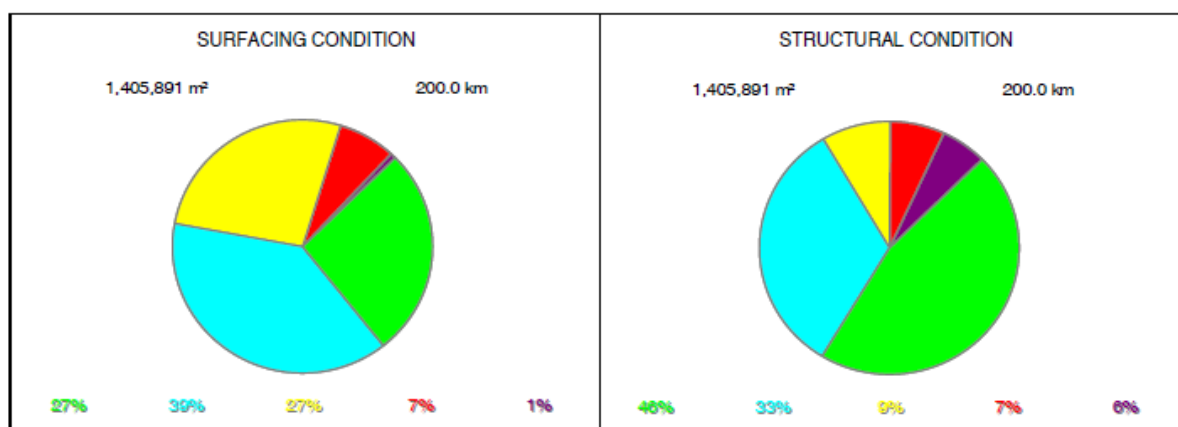
Proclaimed municipal main roads form part of the urban road network, creating a local street network of 222.1 km (surfaced and unsurfaced) in Witzenberg.

Municipal main roads and local streets

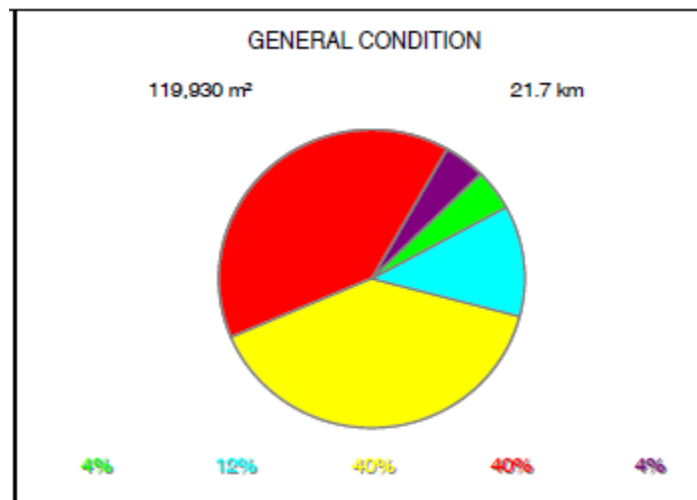
The total length of the paved network is 200.4km (200km tar and 0.4km block paving) with an estimated replacement value of R412.8 million. The average condition of **the network can be rated as fair to poor**, with 8% of the surfacing and 13% of the structure in the poor to very poor category.

Urban road Length by category(surfaced)

Road Category	Length (Km)	% Per Category
Primary Roads	20.1	10%
Secondary Roads	10.1	5%
Main Tertiary Roads	34.1	17%
Tertiary Roads	138.1	69%
TOTAL	200.4	100%



The total unpaved network is 21.7km of which only 7.6km are gravel roads and the rest can be defined as dirt roads. The average condition of the unpaved network can be rated as **fair to poor** with 44% of the roads in the poor to very poor category.



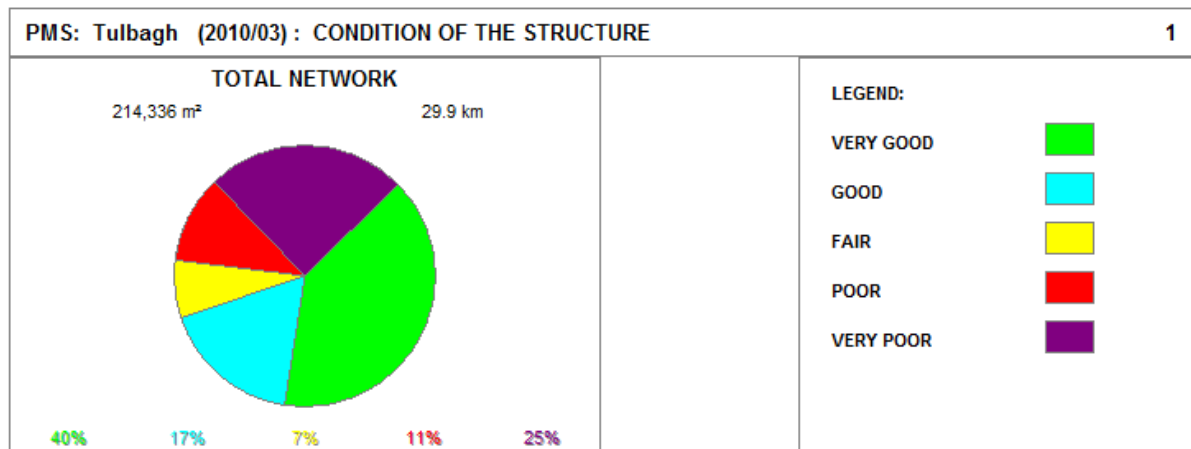
Condition of the road surface indicated that 66% of the surfacing is in good or very good condition. The corresponding value for road structure is 79%. If road surface conditions deteriorate too much, road structure is adversely affected. Therefore, upkeep to protection of the structure through regular maintenance is very important. Fruit and vegetables are brought from various farms around Wolseley, from Op-die-berg and Tulbagh to the factory in Ceres to be packed. This creates an inflow of heavy vehicles to Ceres. From Wolseley and Tulbagh, heavy vehicles travel to Ceres via the Mitchell's pass. The pass has a high quality surface, able to withstand high volumes of traffic. In contrast, the proclaimed road through Ceres is of a different standard and must accommodate the same high volume of heavy vehicles. In the urban streets of Ceres, special NMT signage restricts heavy vehicles from entering the urban areas.

The average condition of the network(surfaced roads) can be summarised as follows:

	Current condition poor & very poor	Maximum allowable	Recommended
Surfacing	8%	10%	< 5%
Structure	13%	5%	< 3%

From the above table it can be seen that the average condition of the surfacing is far above the recommended, which means that there is an urgent need for resurfacing. More alarming is the percentage of the structure that is rated as poor to very poor, and if resurfacing is not done urgently this percentage will increase.

It is especially in Tulbagh where the road conditions are the worst as can be seen from the table below. The total length of the network measures 29.6 km of which 36% is in a poor to very poor condition structurally.



4.3.2.2 Traffic Volumes

Provincial Roads

Rural roads are typically two-lane roads with or without paved shoulders. The roads carry low to moderate traffic volumes and traffic flows are not characterised by high peak-hour commuter volumes.

Municipal Main Roads

The table below summarise the traffic volumes through Ceres, Tulbagh and Wolseley. These traffic volumes are obtained from the provincial RNIS.

Town	Road Number Provincial	Through-Traffic Volume		Percentage Heavy Vehicles
		AADT	AADTT	
Ceres	TR2201	5 500	890	16%
Ceres	MR289	6 000	650	11%
Wolseley	MR305	2 430	390	16%
Wolseley	MR307	1 450	120	8%
Tulbagh	MR312	1 190	60	5%
P.A. Hamlet	MR310	4 350	460	11%

Source: PGWC RNIS List of Urban Roads per Urban Breede Valley 4 March 2010

Local street network

Urban streets carry moderate peak-hour flow volumes. High ADT volumes in the town centres usually follow lower heavy vehicle incidence. Except for traffic volumes logged on municipal main roads through the urban centres, there are no accurate traffic volumes presently available for the remainder of the street network.

4.4 Storm water

No master plans exist for storm water and are urgently required for upgrading and future planning.

The town of Wolseley experiences the most problems with storm water due to the flat gradient of the lower portion of town. Two major canals exist in Wolseley which sometimes overflows in winter. Other areas experiencing main problems are Tulbagh, especially Van der Stelstreet and Prince Alfred's Hamlet. In Nduli in the informal areas open canals and storm water pits are used to dump sewerage from the households, this creates an enormous health risk.

Element Consulting Engineers (ECE) was appointed to compile a stormwater masterplan for Tulbagh. The project scope entails the compilation of a stormwater as-built register and plans as well as the analyses of existing and proposed stormwater infrastructure within the Tulbagh urban edge. The as-built register and plans will be compiled from asbuilt drawings supplied by the municipality, as well as physical site surveys and observations.

4.5 Waste Management

The current waste management system in Witzenberg Municipality is fairly successful in the collection and disposal of municipal solid waste, however, no or very little effort is made to reduce the generation of waste within the municipal area

Due to the relatively small amount of waste generated, mainly due to the low population figures, the economic feasibility of waste recovery through recycling and composting should be carefully investigated. The existing private recycling enterprise is successful only because it sources materials that have been separated at source and is therefore uncontaminated with wet waste.

The analyses of the current waste management system have shown the following:

- all formal urban residential erven are receiving a weekly door-to-door waste collection service
- all collected municipal waste are disposed at the municipality's engineered and licensed waste disposal site near Wolseley. The permit for this site expires in 2013.
- no significant waste recovery is done, except for private enterprises
- no significant waste avoidance is done

4.6 Operating Landfills

Witzenberg Municipality currently operates three landfills. The Wolseley landfill is licensed as a GSB- site and receives waste from Ceres, Wolseley, Tulbagh and Prince Alfred Hamlet. The site is operated by a private contractor appointed by the municipality and has sufficient capacity until 2018. Site operation is average and extension possibilities exist to the west. This site is used as interim landfill until a permanent site has been permitted and the current permit expires in 2013. The technical location of the site is good and consideration should be given to modifying this site's status to permanent. The buffer would require some consideration as informal residential area exists on the eastern boundary of the site.



Wolseley site

The future of the Wolseley site will also be depending on the outcome of the investigation into a regional landfill for the District Municipality. This investigation is currently in progress and the outcome should become available in 2013.

The Tulbagh and Prince Alfred's Hamlet landfill is used for garden waste and builder's rubble only. Operation of the site is average. The Op-die-Berg landfill is also licensed as a communal site. The site is operated according to the trench method and operation is average to good.

4.7 Electrification

The upgrading and provision of bulk infrastructure are mainly guided by the implementation of low-cost- and private developments.

Bulk infrastructure:

Network for Chris Hani Tulbagh low-cost development was upgraded to an amount of R1400000. The 11 kV cable from the Main supply substation in Tulbagh to supply bulk to Chris Hani is being laid at a cost of R340553 (phase 2 of three).

Future funding for bulk infrastructure will be required over the planning period for Chris Hani external supply (Phase three), 11kV supply to the Vredebes housing development in Ceres and to the industrial area in Wolseley.

Upgrading of the 11 kV interconnecting cables from Bon Chretien to De Bos substations will be required to ensure quality of supply to industrial customers.



Provision of new network at Chris Hani low-cost housing project

Bulk infrastructure (2013/14 Projects Planned):

DESCRIPTION	WARD	FUNDING	AMOUNT
PA Hamlet Phase 5 network	10	AFF	R 1 600 000
Prof fees for Rural Dev projects	1, 12	AFF	R 400 000
Remote metering	All	MSIG	R 200 000
11 kv Supply- Industrial Area Wolseley	2, 7	AFF	R 400 000
Office Equipment	All	AFF	R 300 000

Preventive Maintenance:

Preventive Maintenance program: The planned maintenance program could not be adhered to during 2010/11 due to shortage of resources and projects that were carried out departmentally (e.g. Pine Valley and electrification of informal settlements) A planned maintenance policy was approved by Council and a Planned Maintenance Plan is being developed. For the 2011/12 financial year an amount of R2, 905,190 have been allocated for maintenance. The following service delivery gaps have been identified departmentally and will be confirmed by the Master Plans when the report is tabled to council, the projects are not in order of priority:

- Upgrade supply cables from Bon Chretien sub. to de Bos substation (W5),
- Upgrade 11 kV supply from Bon Chretien Substation to N'Duli / Vredebes (W1),
- Establish a switching substation at Vredebes (W1),
- Upgrade 11 kV feeder from Wolseley main substation to Industrial area. (W7)
- Upgrade 11 kV cables from Orange Substation to Voortrekker substation (W5),
- Upgrade 11 kV cables from Owen Substation to Heide Substation (W3),
- Upgrade 11 kV cable from Keet Substation to Staff substation (W3),
- Replace old and unreliable vehicles (all wards),
- Refurbish/replace 11 kV switchgear in Ceres, Tulbagh, and Wolseley (W3, 5, 7, 11),
- Fill vacant posts on the approved organogram,
- Install remote metering at all bulk supply points (W3, 7, 11),
- Complete loading of data on GIS,
- Improve street lighting by upgrading existing streetlights and installing additional lighting (All wards).
- Upgrade 11kV supply to Bella Vista/Skoonvlei Industrial area (W6),
- Upgrade 11kV cables in Tulbagh and Wolseley (W7 and 11)
 - Install 11 kV cable from Brounger Street to Deborah Street (W7).
 - Replace two unreliable and unreliable Cherry Pickers (W6,7).

4.8 Fiscal Overview of Witzenberg Municipality

Via sound and strong financial management over the past couple of financial years, Witzenberg Municipality has moved from an “intensive care” position to a position in the “general ward”, but not quite out of hospital altogether, in other words: relative financial stability.

Witzenberg has also achieved a high level of compliance with the Municipal Finance Management Act and other legislation directly affecting financial management. The switch-over to the new GRAP budgeting model has had a huge effect on Witzenberg. Witzenberg municipality received a clean audit report from the Auditor-General for the 2012/2013 financial year.

Budget outlook for the MTREF period, 2014/2015 – 2018/2019

The proposed total budget for 2014/2015 amounts to R459 million and is comprised of an operating expenditure budget which amounts to R 396 million, and a capital expenditure budget of R 63 million.

The indicative figures for the operating budget for the five year IDP cycle amount to R 2 316 million.

The table below shows the revenue and expenditure breakdown:

Witzenberg Municipality operating revenue and expenditure for the 2014/2015 to 2018/2019 financial are as follows:

Financial Performance	Adjusted Budget 2013/2014 R'000	Budget Year 2014/2015 R'000	Variance	Budget Year +1 2015/2016 R'000	Variance	Budget Year +2 2016/2017 R'000	Variance	Budget Year +3 2017/2018 R'000	Variance	Budget Year +4 2018/2019 R'000	Variance
Property rates	46 899	49 978	6.57%	52 995	6.03%	56 186	6.02%	60 681	8.00%	65 536	8.00%
Service charges - electricity revenue	816	819	0.32%	860	5.00%	912	6.00%	985	8.00%	1 063	8.00%
Service charges - water revenue	168 921	183 430	8.59%	200 734	9.43%	212 781	6.00%	225 547	6.00%	239 080	6.00%
Service charges - sanitation revenue	32 666	32 450	-0.66%	34 450	6.16%	36 517	6.00%	38 708	6.00%	41 031	6.00%

Financial Performance	Adjusted	Budget	Variance	Budget	Variance	Budget	Variance	Budget	Variance	Budget	Variance
	Budget	Year		Year +1		Year +2		Year +3		Year +4	
	2013/2014	2014/2015		2015/2016		2016/2017		2017/2018		2018/2019	
	R'000	R'000		R'000		R'000		R'000		R'000	
Service charges - refuse revenue	15 096	15 185	0.59%	15 980	5.24%	16 879	5.62%	18 229	8.00%	19 688	8.00%
Investment revenue	2 614	2 199	-15.86%	2 309	5.00%	2 448	6.00%	2 644	8.00%	2 855	8.00%
Transfers recognised - operational	89 777	72 506	-19.24%	81 006	11.72%	87 479	7.99%	38 708	6.00%	41 031	6.00%
Other own revenue	43 462	7 267	-83.28%	7 631	4.99%	8 088	5.99%	8 573	6.00%	9 088	6.00%
Total Revenue	400 250	402 096	0.46%	433 738	7.87%	461 150	6.32%	498 042	8.00%	537 885	8.00%
Employee costs	109 663	121 034	10.37%	130 728	8.01%	140 981	7.84%	150 850	7.00%	161 410	7.00%
Remuneration of councillors	7 866	8 364	6.33%	8 949	7.00%	9 576	7.00%	10 246	7.00%	10 964	7.00%
Depreciation & asset impairment	21 454	17 000	-20.76%	19 000	11.76%	21 000	10.53%	22 260	6.00%	23 596	6.00%
Finance charges	13 639	13 085	-4.06%	12 648	-3.34%	13 407	6.00%	13 407	0.00%	13 407	0.00%
Materials and bulk purchases	135 000	147 150	9.00%	158 922	8.00%	170 047	7.00%	181 950	7.00%	194 686	7.00%
Transfers and grants	806	855	6.00%	898	5.00%	952	6.00%	1 018	7.00%	1 089	7.00%
Debt Impairment	19 411	15 000	-22.72%	17 754	18.36%	18 640	4.99%	19 944	7.00%	21 340	7.00%
Contracted Services	11 316	11 683	3.24%	12 195	4.38%	12 827	5.19%	13 725	7.00%	14 686	7.00%
Other expenditure	83 836	62 397	-25.57%	71 235	14.16%	75 014	5.31%	81 413	8.53%	88 273	8.43%

Financial Performance	Adjusted Budget 2013/2014 R'000	Budget Year 2014/2015 R'000	Variance	Budget Year +1 2015/2016 R'000	Variance	Budget Year +2 2016/2017 R'000	Variance	Budget Year +3 2017/2018 R'000	Variance	Budget Year +4 2018/2019 R'000	Variance
Total Expenditure	402 992	396 567	-1.59%	432 329	9.02%	462 443	6.97%	494 814	7.00%	529 451	7.00%
Subtotal	(2 742)	5 529		1 409		(1 293)		3 228		8 434	

Draft Review 2017

Over five year IDP cycle the total annual revenue increases from R 393 million to R 555 million in 2016/2017, and annual expenditure increases correspondingly from R 347 million to R 537 million.

The following table reflects the budget growth pattern for the five year IDP cycle:

Capital and Operating Budget for 2014/15 - 2016/17

Municipal Budget Assessment				MTREF Aggregate
	2014/2015	2015/2016	2016/2017	
Budget item	(R'000)	(R '000)	(R'000)	
Capital	62 922	40 434	44 557	147 912
Operating	402 834	441 847	475 270	1 319 951
Total	465 756	482 280	519 826	1 467 863
As percent share of total budget (%)				
Capital	13.51%	8.38%	8.57%	10.08%
Operating	86.49%	91.62%	91.43%	89.92%
Total	100.00%	100.00%	100.00%	100.00%
Annual nominal growth rate (%)				
Capital		-35.74%	10.20%	
Operating		9.68%	7.56%	
Total		3.55%	7.79%	

Sources of revenue

A municipality's ability to generate revenue is an important consideration for its fiscal sustainability. The tables that follow reflect the overall sources of budgeted revenue for the Witzenberg Local Municipality.

Allocations gazetted and published in the DORA indicate that National and Provincial Treasury support Witzenberg Municipality.

The Provincial Treasury published the distribution of Provincial allocation in the provincial gazette, and is set out in the table below.

	2014/2015	2015/2016	2016/2017
	R'000	R'000	R'000
Conditional Grants:			
IHHSDG	23 228	18 848	20 254
CDW OPERATIONAL GRANT	140	147	155
HOUSING CONSUMER EDUCATION GRANT	0	0	0
MAINTENANCE OF PROCLAIMED ROADS	84	0	0
MOBILITY STRATEGIES	0	0	0
NON MOTORISED TRANSPORT	0	0	0
LIBRARY SERVICES	9 745	7 892	8 365
CLEANEST TOWN COMPETITION	0	0	0
DEVELOPMENT OF SPORT AND RECREATION FACILITIES	0	0	0
Unconditional Grants:			
None			
PROVINCIAL GRAND TOTAL	33 197	26 887	29 044